

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method of managing an original executable code forming a program to be downloaded into a reprogrammable on-board computer system in a microprocessor card, said code possessing a cryptographic signature and being executable by the microprocessor of the on-board system after verification by the latter of the validity of said signature, said method comprising the following steps:

- off card:

- identifying a modified executable code corresponding to the original code, adapted to a predefined specific use^{[[;]]}, and

- from variations between the data of the original code and the corresponding modified code, calculating a software component which, when it is applied to the original code, makes it possible to reconstruct the modified code; and

- signing said software component;

- downloading the signed original code and the signed software component into the card; and

- on card:

- verifying the signatures respectively of the original code and of the software component^{[[;]]}, and

- applying the software component to the original code so as to reconstruct the modified code for its execution by the microprocessor.

2. (Previously Presented) A method according to claim 1, wherein the original executable code consists of an intermediate code, executable by the on-board system microprocessor by means of a virtual machine for interpreting this intermediate code.

3. (Currently Amended) A method according to claim 2, wherein the virtual machine is provided with an execution stack and wherein the downloaded software component, which is applied on card to the original intermediate code, makes it possible to reconstruct a modified intermediate code a priori satisfying the verification criteria for said intermediate code according to which the operands of each instruction of said code belong to the data types manipulated by this instruction and, on each target switching instruction, the execution stack of the virtual machine is empty.

4. (Previously Presented) A method according to claim 3, wherein the modified intermediate code obtained by the application of the software component is verified, before its execution by the microprocessor by means of the virtual machine, according to a process verifying that the modified intermediate code satisfies the verification criteria.

5. (Previously Presented) A method according to claim 1, wherein the downloaded software component, applied on card to the original code, makes it possible to reconstruct a modified code so that its execution is more rapid compared with that of the original code.

6. (Previously Presented) A method according to claim 1, wherein the downloaded software component, applied on card to the original code, makes it possible to reconstruct a modified code so that it procures an optimization in terms of size compared with the original code.